wbcsd

FReSH insight report

CONSUMPTION BEHAVIOR AND TRENDS:

Understanding the shift required towards healthy, sustainable and enjoyable diets

FReSH

Food Reform for Sustainability and Health (FReSH) thanks the following companies for their contributions to this insight report on consumption behavior and trends.

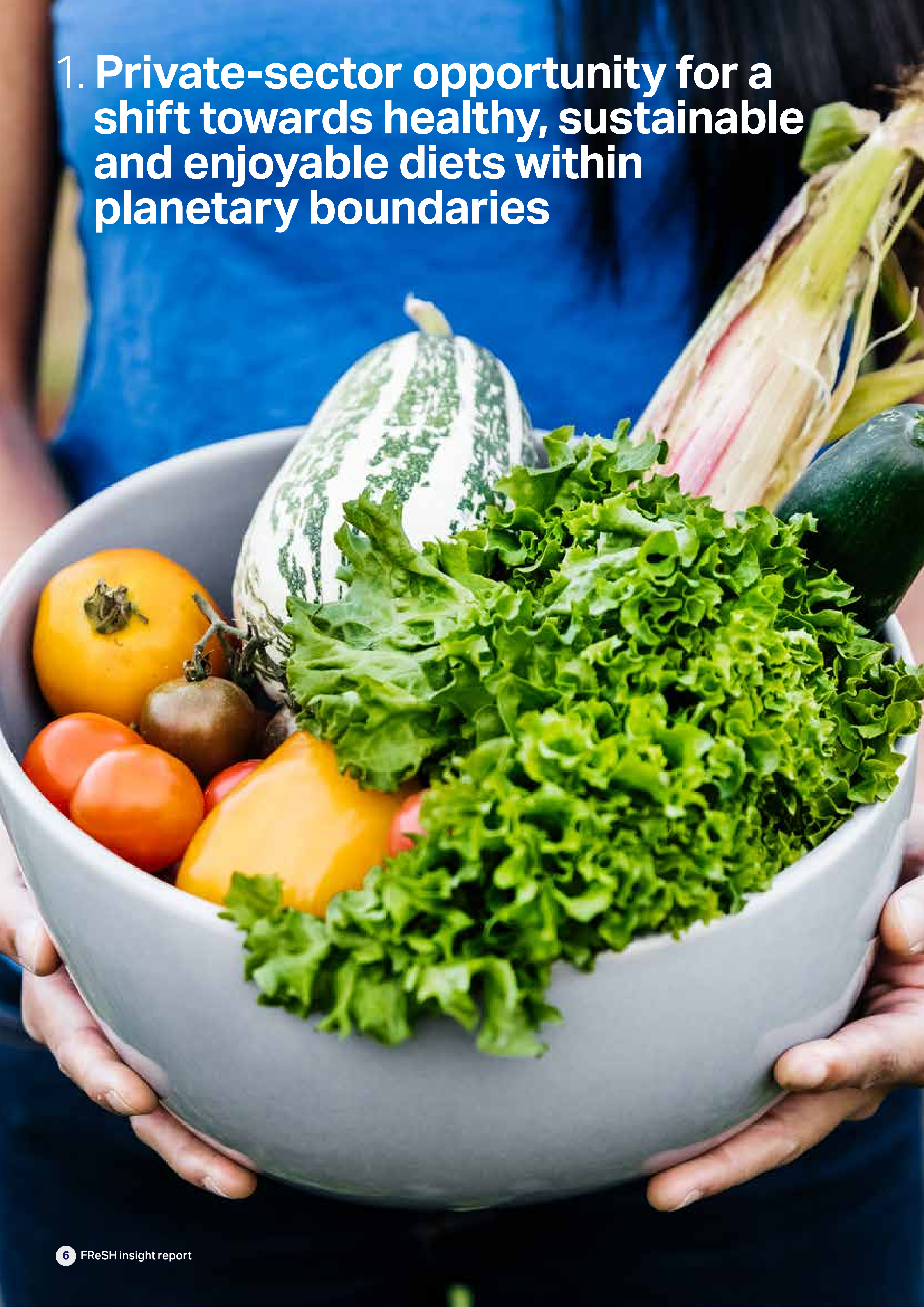
FReSH consumption workstream leaders:

FReSH consumption workstream member companies:

FReSH would also like to thank the following organizations for sharing their case studies in this report:

Content

1. Private-sector opportunity for a shift towards healthy, sustainable and enjoyable diets within planetary boundaries



As businesses we have provided a broad set of food choices to people for decades. In this era of increasingly constrained resources, population growth and dietary-related disease, we need to deliver a broad set of food choices that all taste good, are nutritious, healthy and sustainable.

To drive these better choices we must harness our knowledge of trends, behaviors and attitudes to food and align our business models within this paradigm shift.

Peter Bakker,
President and CEO,
World Business Council for Sustainable Development

Our global food system is unsustainable, unequal, destabilizing and unhealthy.

Not only is one third of food produced lost or wasted and 40% of agricultural soil degraded, 800 million people are also undernourished while food insecurity generates civil unrest. In addition, two billion adults are overweight, leading to increased health care costs and a rise in noncommunicable diseases in both the developing and the developed world.

Fixing this broken system will require a full-scale transformation. We need to provide healthy, enjoyable diets for all while contributing to socioeconomic development and minimizing (and eventually eliminating) environmental impacts and waste.

And while we acknowledge that business has played a key role in these systems both on the positive and the negative side, businesses are joining forces to transform them. In order to identify best practices to address the consumption challenges listed above and to improve the value chain, a joint program has been established between EAT and the World Business Council for Sustainable Development (WBCSD): Food Reform for Sustainability and Health (FReSH). It is designed to accelerate transformational change in global food system, ensure healthy, enjoyable diets for all, and provide foods that are produced responsibly within planetary boundaries.

Besides the societal and environmental urgency, improving food systems also provides a significant global business opportunity: A worldwide food and agriculture system in line with the Global Goals has an estimated value potential of over US$ 2.3 trillion at current prices.

US$ 2.3 T

is the estimated value of food system in line with Global Goals

This report assesses people's food behaviors, their preferences, and how they select food, showing that while several patterns can be categorized, there is no clear and objective way to project the behavior at any given moment. Several influencers are furthermore identified, which play a critical role – sometimes from a very early point in our lives. While those influencers are very important to understand how to drive transformational change, this report also assesses barriers - namely affordability, accessibility, and food safety - that prevent a shift towards a more healthy and sustainable diet.

Looking into the future, seven major trends forseen by our member companies are summarized, which will guide food consumption in the near future. Based on those findings and the identified trends, this report proposes three opportunity areas for the private sector to accelerate businesses' contribution towards a positive change of the food system: (i) innovation (ii) proactive self-regulation and (iii) shaping demand by engaging with people in the right way and gives examples of current initiatives and projects moving in that direction.

When FReSH was launched jointly by EAT and the WBCSD, a set of workstreams were created across the value chain, from production to consumption.

The consumption workstream set out to provide an overview of the aggregated knowledge shared confidentially by our participating member companies as well as publicly available consumer insight reports. This report is a summary of findings and observations collected from nearly 80 consumer research reports. It provides a common base of knowledge about people's food consumption behaviors, their preferences, and how we as people select food both globally and across eight regions—broken down into developing and developed regions

This report does not intend to address a specific gap in consumer research or provide detailed scientific proof of each trend identified, but rather to provide transparency on consumption insights and opportunities identified by the program. The presented information is only a starting point meant to serve as food for thought and a basis from which to further develop opportunity areas and ideas such as looking at how business has driven consumption patterns and internal drivers.

In addition, the report highlights the work that member companies and others are already doing to help accelerate positive consumer behaviors, preferences, and trends. These are first steps toward the FReSH shared ambition and the right transformational direction.

2. Introduction

A full-scale transformation of the food system is required to enable healthy, enjoyable diets for all while contributing to socioeconomic development and minimizing (and eventually eliminating) environmental impacts and waste.

Businesses interact with customers in different ways and with different purposes. While it is acknowledged that every business has to promote its own products in order to make profits, there are many examples of how making profits and "doing good" can be combined.

The potential value for a worldwide food and agriculture system in line with the Global Goals is estimated at

US$ 2.3 trillion

at current prices.

For instance, reducing food waste in the value chain is estimated to be worth up to US$ 405 billion a year by 2030, while low-income food markets are valued at up to US$ 265 billion in revenue growth[1]. Where traditionally the focus of efforts to address food system sustainability issues was on farm to fork, it is now time to look at fork to farm: considering consumers' needs and desires at the heart of solutions to enable longer-term consumption shifts while taking a complete value chain approach that links food consumption to production, distribution, and agriculture.

The majority of the food consumed throughout the world is produced and supplied by the private sector. This puts large and small businesses at the heart of both the challenges and the solutions. The companies that embark on this transformation journey first have the chance to demonstrate leadership and position themselves ahead of the curve.

[1] Business and Sustainable Development Commission, 2017. Better Business Better World. Available at: https://sustainabledevelopment.un.org/index.php?page=view&type=400&nr=2399&menu=1515

The changing food landscape demands urgent adaptation

At present, agriculture is estimated to be the driver of around 80% of deforestation and 70% of freshwater resource usage worldwide. Because of pollution and depletion of water resources, 28% of agriculture (including 58% of irrigated cropland) already takes place in water-stressed regions[2]. Moreover, nearly 70% of all agricultural land globally is considered degraded: eroded or robbed of its nutrients by poor land management and rapidly losing its ability to provide sufficient food to local and far-flung populations. Population and economic growth brings an increased use of these natural resources, creating greater pressure on food systems and the land, water, and energy required to grow food. Since the world's population is projected to reach 9.2 billion people by 2050[3], sustainable solutions need to be found. In addition, 66% of the world's population is expected to live in cities by 2030. The increase of diverse cultural backgrounds and skill sets in big cities is creating an emerging middle class that demands a greater choice of foods and flavors.

Convenience will also be a major driver of food consumption in cities, since time is a scarce resource. As people become more urbanized, their food selection is increasingly determined by what is quick, available, and ready-to-go. Therefore, hyper-convenient digital shopping will play a big role, since it is making food accessible everywhere at any time.

In general, digital platforms have the potential to change consumption behaviors by increasingly providing consumers with consistent and high-quality food, consumption data, and speed of delivery. Powered by increasingly capable mobile technologies, consumer choice is also greatly influenced by social media. While technologies are enabling increased food transparency and accessibility in urbanized areas, the increase in low-end discounters and price transparency can enable food access in low-income neighborhoods and communities. While the world is wealthier than it has ever been, with people in the middle-income bracket making between US$ 10 and US$ 20 per day doubling in the last 15 years[4], income inequality remains one of the biggest social challenges we face, with 56% of the world's population in the low-income bracket[5]. In addition, the cost of living is increasing faster than income for many people, impacting their consumption power and the foods they are able to buy. This is especially critical since food prices are expected to double over the next two decades[6], mostly affecting the emerging middle classes living in cities who are dependent on cash from jobs in a vulnerable job market threatened by increased robotization.

All in all, the changing food landscape is presenting serious challenges that need to be addressed by all players involved.

80%
of deforestation and 70% of freshwater resource usage through agriculture

66%
of the world's population expected to live in cities by 2030

Consumer choice greatly influenced by social media

2 Food and Agriculture Organization of United Nations, 2017. The Future of Food and Agriculture
3 https://www.un.org/development/desa/en/news/population/world-population-prospects-2017.html
4 http://www.pewglobal.org/2015/07/08/a-global-middle-class-is-more-promise-than-reality/
5 http://www.pewglobal.org/interactives/global-population-by-income/
6 https://www.theguardian.com/environment/2011/may/31/oxfam-food-prices-double-2030

70%
of all agricultural land globally considered degraded

World's population projected to reach
9.2 billion
people by 2050

Convenience
as major driver of food consumption in cities

Digital shopping making food
accessible
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56%
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Food prices expected to
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FReSH as a driving force behind transformation

In order to identify best practices to address these consumption challenges and deliver improved health and sustainability along the food value chain, a joint program has been established between EAT and WBCSD: Food Reform for Sustainability and Health (FReSH). It has been designed to accelerate transformational change in global food systems in order to provide healthy, enjoyable diets for all-diets that are produced responsibly within planetary boundaries.

To achieve this ambitious goal, FReSH has brought business and science to work together. It draws on global knowledge and efforts from premier research institutions and is working with the business community to develop successful and impactful solutions.

Putting the consumer at the center, FReSH has emphasized understanding consumption behavior and trends since its launch in mid-2016. With currently around 40 member companies, FReSH is trying to catalyze change across food systems, now focusing on a number of transformational goals, specifically dietary shifts, food loss and waste, the true cost of food, and addressing hunger in supply chains, along with measuring and reporting.

3. Understanding consumers and future trends

The focus of the work within the consumption workstream of FReSH has been to assess people's food consumption behaviors, their preferences, and how they select food - based on over 80 reports from public sources and member companies.

We have evaluated the main influencers of food selection, assessed the main barriers, and identified the major trends shaping future food consumption.

The objective of this work has been to highlight the food consumption trends and behaviors that need to be accelerated, and conversely those that need to be decelerated and eventually reversed, in order to identify concrete steps to improve the food system and to subsequently support a healthy and sustainable diets within planetary boundaries.

The heat map in Figure 2 provides a consolidated overview of the relevance of global behaviors based on the "food consumption" workstream's research findings. It also includes consumption behavior barriers and enablers, as well as future trends across eight different regions, and shows the relative importance of a topic across regions, from insignificant to highly relevant.

The original research conducted by the consumption workstream analyzed eight regions of the world. This report provides a high-level summary of this work by focusing on the aggregated global findings; the detailed findings would go beyond the scope of this report but are available to FReSH member companies upon request.

Current consumption behaviors

A growing number of people around the world are seeking healthier lifestyles. However, there are many factors influencing people's food choices including availability, affordability, cultural preferences, lifestyles and convenience.

As seen on the Relevance Heatmap (Figure 2), a few major consumption behaviors stand out globally today:

- **Convenience and on-the-go:**

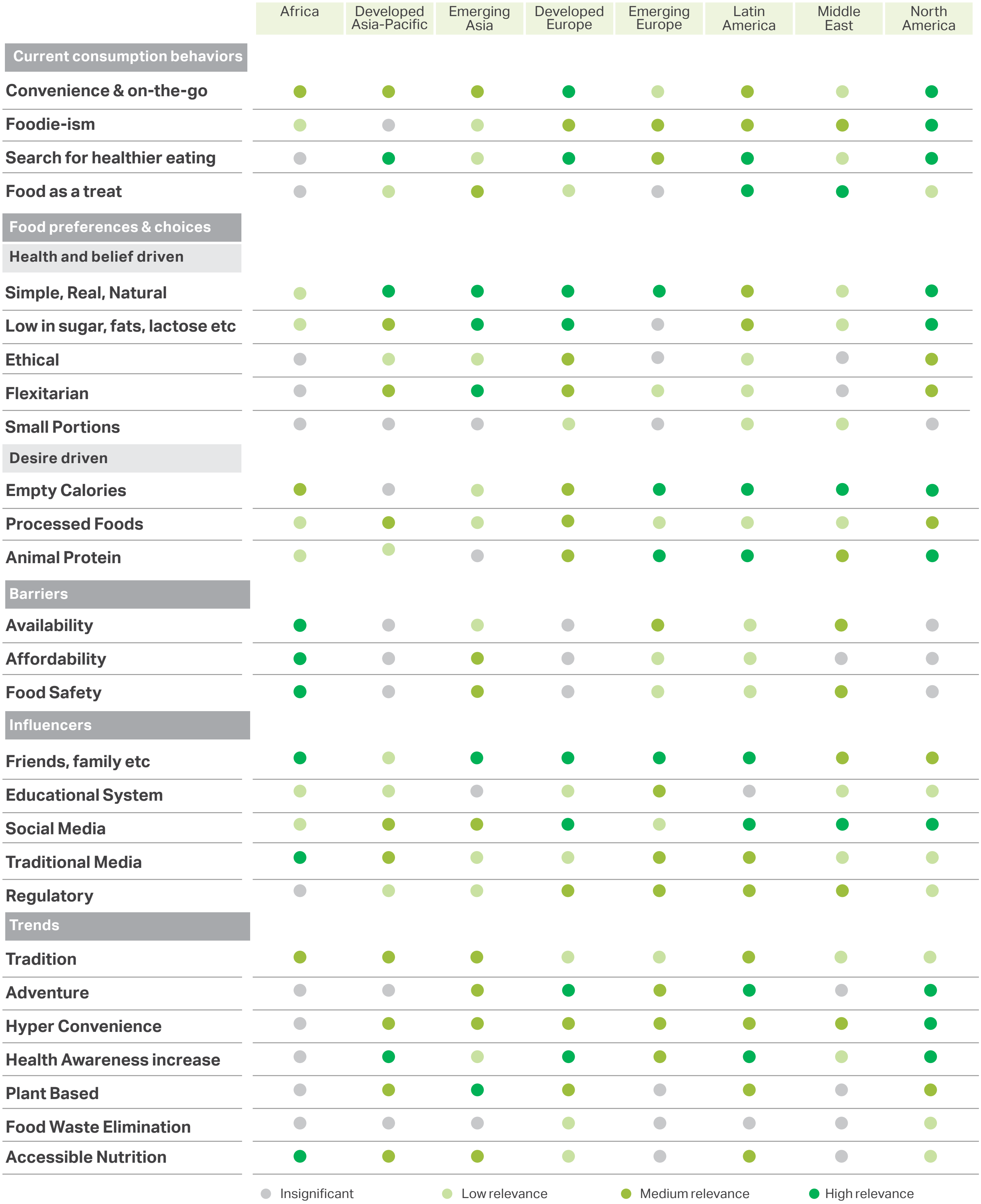
  The time investment required to access a meal can be as influential in the food selection process as nutrition or ingredient claims. Less formal meals, up to six, are replacing the traditional three meals a day. Complete meals are being substituted with quick mini-meals and snackification, both at home and on the go, to adapt to people's lifestyles, especially in cities. In the UK, The Telegraph called millennials the "takeaway generation," with research showing that they are ordering up to 10 pizzas a month. This growing trend is linked to the ease of ordering meals with an increase in the number of services such UberEats, Deliveroo, and Amazon. In Southeast Asia, there was a 133%[7] increase in the number of food and drink launches with on-the-go claims in 2016 compared to 2012. In Australia, Mintel shows a 55% increase in the number of food and drink launches advertised as "on the go" between 2012 and 2016.

Figure 1: Definitions for Relevance Heatmap

1. BEHAVIORS	EXPLANATION
Convenience and on-the- go	Speed and ease as a key purchase factor
Food as a treat	Food as a reward or stress relief towards instant satisfaction
Food as self-expression	Food as a reward or stress relief towards instant satisfaction
Food as an experience	Desire to discover new products or features and add them to one's diet
Search for healthier eating	Demand for natural, organic, simple, and less processed foods; strongly driven by Millennials
2. FOOD PREFERENCES AND SELECTION	
Simple, real, natural	Search for minimally processed and more natural or organic foods
Low in sugar, fat, lactose, etc.	Low in sugar, fat, caffeine, and components leading to intolerances
Ethical	Ethical attributes in foods such as fair trade, organic, portion control, and fortification certifications
Flexitarian	Adoption of a flexitarian diet, one that is plant-based with the occasional inclusion of meat
Smaller portions	Consumption of smaller portions of food in general and of indulgence treats in particular
Processed foods	Desire for convenient processed foods as a result of an urban lifestyle
Animal protein	High animal protein consumption, mainly meat
3. BARRIERS	
Availability	Sufficiency of the national food supply, the risk of supply disruption, national capacity to disseminate food, and research efforts to expand agricultural output
Affordability	Ability of consumers to purchase food, their vulnerability to price shocks, and the presence of programs and policies to support customers when shocks occur
Food safety	Variety and nutritional quality of average diets, as well as the safety of food
4. INFLUENCERS	
Social media	Celebrity endorsements, Instagram, Facebook, online advertising, and company websites' influence on eating behaviors
Friends, family, etc.	Recommendation from a friend or family member
Traditional media	TV, radio, and newspaper advertising
Educational system	School influence through food education and eating habits
Regulatory	Government initiatives to influence food selection towards better choices
5. TRENDS	
Tradition	Maintenance and celebration of traditional food habits
Adventure	Search for unique food experiences, new ingredients, and flavors
Plant-based	Desire to eat natural, simple, and flexible diets, downsizing meat protein consumption
Food waste elimination	Industry and individual efforts towards food waste elimination
Hyper-convenience	Time and ease of access as a key factor in product choice
Health awareness increase	Desire for healthy and sustainable food as a means of achieving well-being and quality of life
Accessible nutrition	Increased demand for safe, affordable, and nutritious foods. More people expecting to find affordable options in the marketplace that are also healthy

[7] https://foodindustry.asia/a-look-at-food-and-drink-trends-in-southeast-asia

Figure 2: Relevance Heatmap



- **Foodie-ism, the appetite for new food experiences and the use of food as self-expression**, is driven by Millennials and Gen Z who want to experience new flavors and textures. This diversity is driving food culture trends around the exploration of authentic, global food experiences, seeking pleasure and indulgence. Foods from all over the world are now making their way on to menus and into packaged food. People from Russia to Brazil are more open to experimenting with new and exotic flavors and ingredients. In the United States, Millennials and Gen Z consumers are ethnically diverse and incorporate eating habits from across many different cultures. In developing countries, higher spending power has also led to increased demand for foreign cuisine experiences. Familiar foods and traditional meals "with a modern spin" through packaging, recipe, or cooking (e.g., on-the-go format, instant) are also in high demand. In addition, in a world where social media play such an important role in the way people interact, participate in groups, and express themselves, an increasing number of people are sharing their food experiences on Instagram and other social media channels. According to a 2016 BBC Good Food Nation Survey, 40% of Millennials have posted photos of their food on social media channels. This trend raises awareness and appetite for adventure and gourmet eating and influences the food culture among young people.

- **The search for healthier eating** is seen through an increase in flexitarians (those who prefer plant-based dishes with the occasional inclusion of meat) and the greater demand for natural, organic, simple, and less processed foods, both in developed and in developing markets. Of particular interest here are the "Millennial food sophisticates" who seek foods that are minimally processed (66%) and more natural or organic (65%). More of them (63%) believe that they are eating healthier than their parents. Millennials are also constantly getting new food information from social media and friends. In the last five years, the number of products labeled as vegetarian has increased by 25% and vegan by 257%[8].

- **Food as a treat** describes foods that serve as rewards or stress relievers. They are becoming increasingly popular, especially as more people move to cities and have busy lifestyles, where food often provides emotional breaks and rewards towards instant satisfaction.

Shifting towards healthier and more sustainable consumption behavior will require to take into account present eating behaviors and the relative importance it has in different regions.

Furthermore food systems and consumption behavior change cannot be achieved without meeting consumers where they are today. The shift also requires an understanding of how people's food choices are made at the moment of choice, which can be contradictory and do not follow a clear rationale in the context of different circumstances and the person's physical and emotional state at that point in time.

Products labeled as **vegetarian** have increased by **25%**

Products labeled as **vegan** have increased by **257%**

[8] https://www.r-trends.ru/netcat_files/526/459/global_food_and_drink_trends_2017_mentel.pdf

Food preferences and choices

Predetermined food preferences influence people's food choices, but other external factors can also impact what people choose to eat at any particular moment in time. In that context, two prevailing choice categories have been derived that drive consumption behavior at the moment of choice depending on an individual's circumstances.

This dual behavior is often displayed by the same individuals, who make very different food choices depending, for example, on their state of mind, the types of food offerings available at a certain point in time, and also the type of meal occasion. In some cases, the internal and external circumstances affecting an individual might motivate them to make a health-conscious food choice, while a few hours later the same individual could be making a choice driven by desire rather than health concerns, with the motivation of instant gratification.

Therefore, in order to positively shift consumption patterns towards healthier and more sustainable decisions, we must also understand how the context and the individual's state of mind influences motivations towards a health- or value-driven choice versus a desire-driven one.

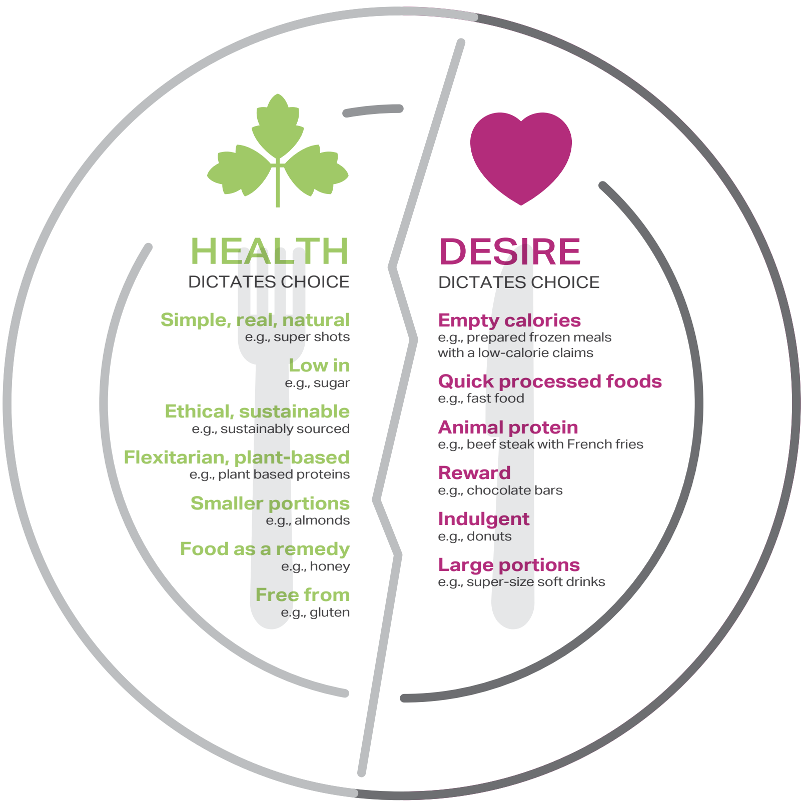
We have listed different elements of those choices on the Relevance Heatmap. Figure 3 sums up the main differences between the two prevailing behaviors towards food choices.

Research shows that nudging people to make better food choices for themselves is not about telling them what they should eat but instead is all about making it really easy and appetizing for them to make good food choices, removing the cost and access barriers and ensuring that the food taste appeal is enhanced and never compromised.

Achieving impact calls for cross-sector collaboration and a joint effort of research, business, governments and civil society.

In one of our case studies from the World Resources Institute, we show how, e.g., language that increases food appeal can positively influence consumer choices. FReSH will continue to explore this topic as part of one of our current focus areas that deals with understanding how to make dietary shifts happen.

Figure 3: Health and desire driven preferences and choices



Barriers and enablers

While healthy foods are becoming more accessible and in many cases also more affordable, people's decisions on what to eat also depend on physical, economic, attitudinal, psychological, biological, and social barriers or enablers.

Some of the most important barriers include:

Availability

- Food deserts are common in both developed and developing urban areas. They represent a significant challenge for low-income communities to access nutritious and fresh foods in the community, affecting as many as 20 million people in wealthy nations like the US[9].
- In rural communities in developing countries, there is a need for greater access to nutritious fresh vegetables, fruits, and other foods. According to the World Health Organization (WHO) "developing countries face policy-related and structural barriers to fruit and vegetable production and availability"[10] with many developing **countries losing 30–40% of their fruits and vegetables grown after the harvest.**

Creating the practices to enable access to safe and diverse fresh vegetables and fruits is a critical step in closing the nutritional gap in many of these communities. Building awareness and mental availability of the taste and health benefits of vegetables and fruits is also a key factor in closing the consumption gap.

Affordability

- Today, cost is one of the top barriers preventing people from buying fresh and healthy foods. This is true among low-income and middle classes. In Asia-Pacific, fresh foods account for as much as **60% of food, grocery, and personal care expenses across retail channels, on average. Fresh foods account for 53% of average expenses in Europe, 30% in the United States, and 25% in Latin America[11].**

Food safety

- Food safety continues to be a concern in developing markets where, for example, fresh produce can be available but is not always safe to consume due to water-borne diseases or lack of hygiene while handling food. According to the WHO, **about 1 in 10 people in the world fall ill and over 400,000 people die annually after eating contaminated food**.[12]

9 https://www.ers.usda.gov/data-products/food-access-research-atlas/documentation/
10 http://www.who.int/bulletin/volumes/91/1/12-106955/en/
11 Nielsen, 2013, "Why retailers are keeping it fresh"
12 http://www.who.int/mediacentre/news/releases/2015/foodborne-disease-estimates/en/

Understanding the current barriers to healthy and sustainable food choices is essential for the food industry to tackle the challenges that will drive the transformation. While these barriers vary by region, affordability and food safety are consistent barriers around the world. Food actors working to turn barriers into enablers towards healthier and more sustainable eating need to keep in mind that "taste is king" in food. Taste is indeed one of the main drivers why people buy food, so any efforts to shift consumer behavior should include a strong taste proposition.

Business can play a vital role in overcoming these obstacles by turning supply chain, commercial, and consumption barriers into opportunities and enabling more people to eat healthy and sustainable diets.

Finally, while availability, affordability, and food safety are the most critical barriers, businesses will need to continue to improve nutritional value and understanding, especially acknowledging that dietary habits and choices develop early in life.

Food influencers

Eating behaviors are already shaped in people first formative years as children learn what, when, and how much to eat based on culture, family, attitudes, beliefs and surroundings.

The most important influencing factors are described in more detail below:

- **Parents play a critical role in shaping their children's food** choices based on their own beliefs on what foods support a healthy child.
- **The school system and media also influence a child's eating culture**. Ingrained food beliefs or paradigms are shaped by the child's social context and have a direct impact on his or her food choices in the short and long term. For example, today's eating culture makes it acceptable and even preferable for many families to switch from daily home-cooked meals to packaged foods and food services.
- **From childhood into adulthood, social context strongly influences eating behavior.** We eat differently in a social setting than when we are alone. Moreover, our dietary choices tend to converge towards those of close social connections.
- **Social media recommendations received from food influencers** and close networks of friends and colleagues through the internet or in apps can have a greater ability to reshape food narratives, e.g., gluten-free or GMOs, than science-based narratives. The success of the social media food influencers builds on the trust that people place on the social media channel and the voices of other citizens and social influencers. Bloggers and other cultural food influencers are important stakeholders to engage in reshaping the food narrative and what constitutes a healthy and sustainable diet relevant to the local culture. This holds true especially within the group of Millennials, 40% of whom have posted photos of their food on social media, according to a 2016 BBC Good Food Nation Survey.

These influencers, as well as people's eating behaviors, preferences, and barriers have created a food culture and set of trends that will continue to drive the food system in the future.

We want to explicitly acknowledge at this point that while business can play a key role influencing people's consumption behaviors – and not always for the better – several of the societal influencers listed above can have an even stronger influence on people's eating behaviors than individual companies.

Food trends and future drivers

Based on desk research with FReSH member companies, this section lists some of the most important trends to impact food culture in the near future.

Rooted in culture and tradition

According to Mintel, two in three Chinese adults prefer to eat a familiar Chinese breakfast rather than newer Chinese or Western options[13]. The familiarity with the taste profile and certain local flavors and recipes with the benefit of increased convenience in the format or preparation is a food trend identified across cultures. Convenient packaging and food service solutions such as on-the-go and takeout are a welcome upgrade to the already familiar foods they love.

Food adventure shared with technology

Around the world, we're experiencing an insatiable appetite for sharable food experiences, tasting new ingredients and flavors, and turning them into social currency. A new wave of meal kits and customized food services are gaining momentum in developed markets, demonstrating a new trend towards food customization and enabling technologies that make it easier for people to create, prototype, and market unique food offerings.

Hyper-convenience

Food services are emerging that include personalized recipes, diets, delivery and ingredient customization in all possible combinations around people's lifestyles. Time is a very important consideration when choosing what to eat and can counteract or even overrule nutrition and health factors if a choice needs to be made.

[13] https://foodindustry.asia/a-look-at-food-and-drink-trends-in-southeast-asia

Health awareness increase

Increased individual and collective consciousness are linking healthy and sustainable food with well-being and quality of life, thus supporting expanded food health and sustainability claims. For example, in Japan there is a growing demand for healthier and functional products as the population ages. In Australia, there has been a rise in popularity of juice detox drinks, as a result of celebrities advocating them as a good way to cleanse the body of impurities. Finally, there is also an emergence of personalized nutrition and DNA diets that are radically changing the way in which people seek nutritional advice and personalized health diets.

Accessible nutrition

The demand for affordable nutritious foods for low-income and new middle-class people is perhaps one of the greatest growth opportunities for food companies.

Plant-based foods

Natural and simple diets are on trend. The percentage of flexitarians is growing across the world. The United States and Australia are driving the trend in these early stages. In Southeast Asia, vegetarian claims increased by 140% in the period between 2012 and 2016, and vegan claims increased by 440% during the same period for food and drink launches in the region[14].

Food waste elimination

Mintel calls this trend "Waste Not." It captures the many industry and individual efforts towards food waste elimination. Many retailers in Europe are already selling imperfect fruits or have unused food collection plans. This is still an emerging opportunity, with the United States and Europe leading the way.

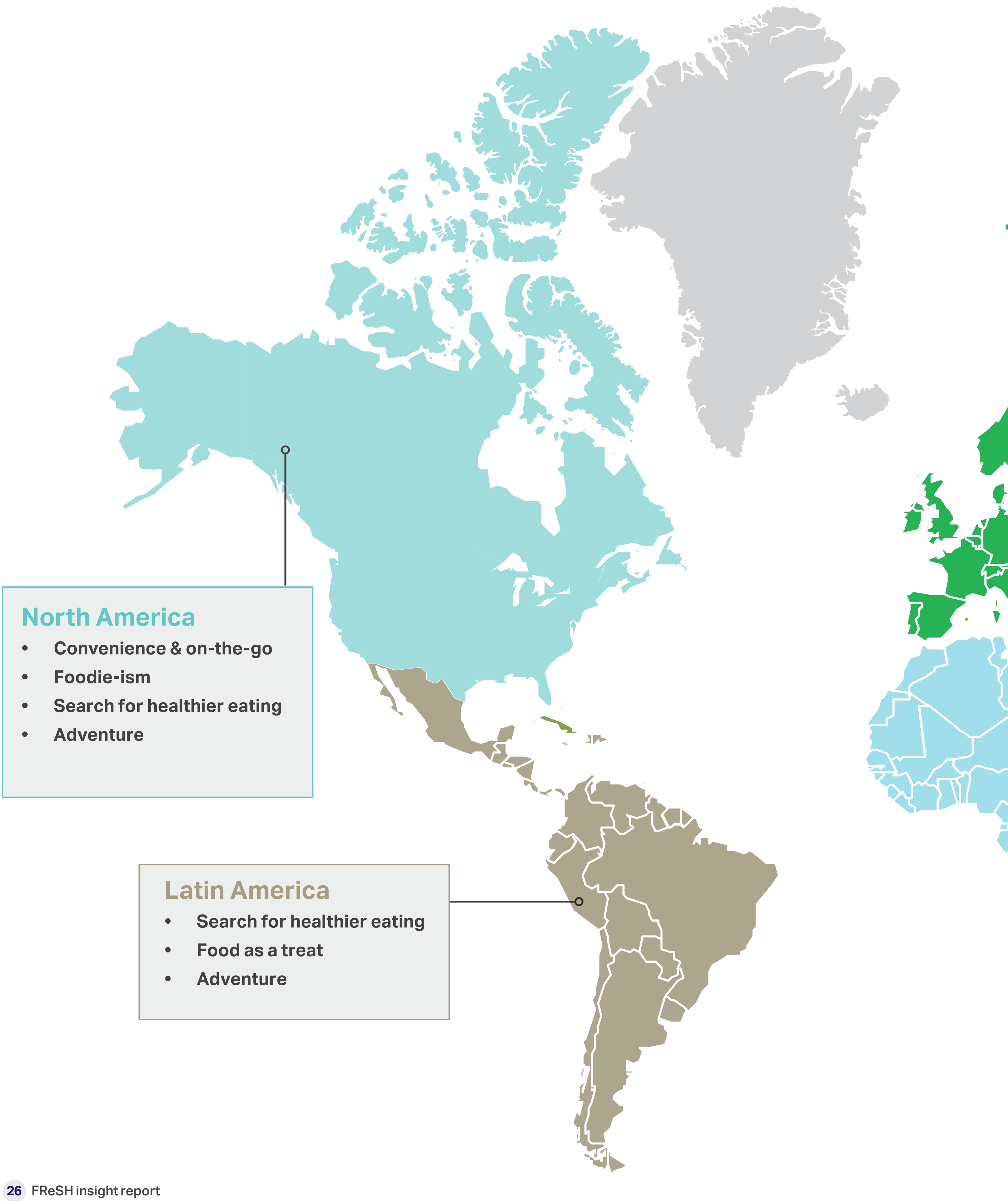
Consumption behaviors and future trends vary significantly across regions.

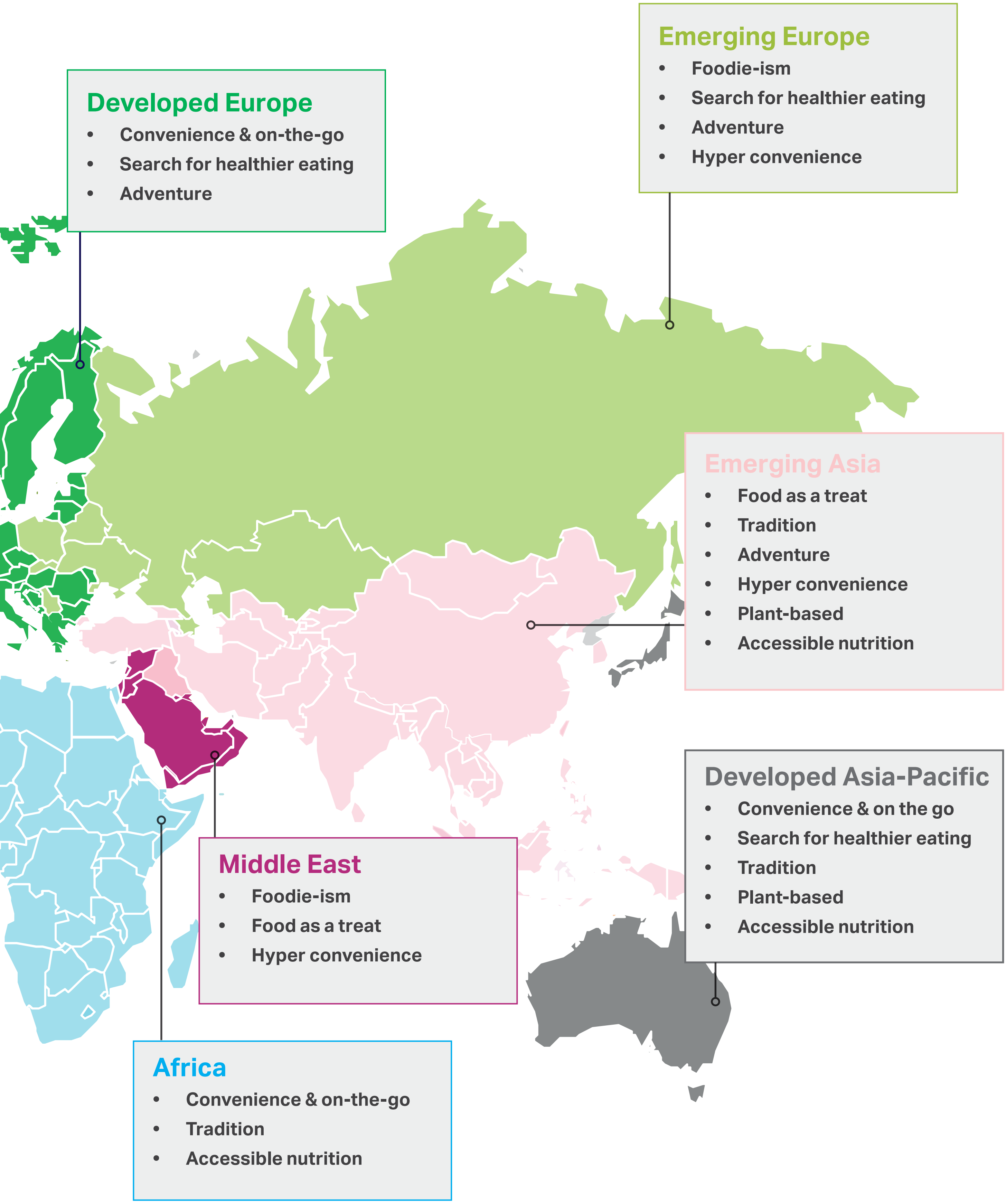
While in developing countries convenience, food as a treat, and food adventure are the top consumption behaviors and food trends, in developed countries the focus is on convenience and proactive health. Figure 4 on the next page provides an overview of the most prominent behaviors and future trends FReSH consumption work stream has identified for different regions:

[13] https://foodindustry.asia/a-look-at-food-and-drink-trends-in-southeast-asia

Consumer trends worldwide indicate increasing demand for affordable healthy and natural products

Figure 4: Top consumer preferences and trends by region





Developed Europe
Convenience & on-the-go
Search for healthier eating
Adventure
Emerging Europe
Foodie-ism
Search for healthier eating
Adventure
Hyper convenience
Emerging Asia
Food as a treat
Tradition
Adventure
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Plant-based
Accessible nutrition
Developed Asia-Pacific
Convenience & on the go
Search for healthier eating
Tradition
Plant-based
Accessible nutrition
Middle East
Foodie-ism
Food as a treat
Hyper convenience
Africa
Convenience & on-the-go
Tradition
Accessible nutrition

4. Opportunity areas for the private sector to drive transformational change towards healthy and sustainable diets

Although some businesses are already working towards a positive shift in the food system, the private food sector needs to do more to drive transformational change

While we recognize the role that public-sector regulation needs to play, we believe that business action is also extremely important to drive the transformational change that is needed in the food system in the near future. The private sector can use this opportunity to go beyond what the public sector regulates and strive to be at the forefront of this movement. For that reason, the private sector is even more important to drive transformative change in consumption behavior towards "healthy, enjoyable diets for all, produced responsibly within planetary boundaries by 2030."

Based on the analysis report of the FReSH research findings, three opportunity areas for the private sector have been identified.

A. Innovation

Nutrient-rich foods:
Many people today believe a product is better for them because it is labeled as "free from" or "low in", missing the bigger picture of whether the food is nutrient-rich and supports a balanced diet. Food brands can work to make foods that are more nutrient-dense and to promote the FReSH healthy and sustainable foods narrative aligned with the fast-growing trend towards simple, natural, and real food through product innovations.

Alternative protein sources:
The growing trend towards more diversified and alternative protein sources opens up significant opportunities for product innovation and mind-changing storytelling with protein sources coming from fish, insects, and pulses, to name a few.

Food redesign for convenience, health and sustainability:
Unfortunately, most convenient foods today for the emerging middle class are not exactly healthy or sustainable. This opens up opportunities for food companies to redesign existing products as well as create radically reformulated new offerings with a focus on connecting optimal processing, nutrient-rich foods, and alternative proteins to help close the gap.

Sustainable packaging:
Connected to the demand for convenient foods, there are many opportunities to leapfrog on sustainable packaging solutions. There is also an opportunity to push towards new methods of conservation, freshness inventory tracking, or resealable packaging to preserve freshness.

Proactive health opportunities in retail:
Retailers can leverage trends of proactive health, convenience, and diversified proteins by promoting products with those attributes, providing displays, and creating maximum exposure in stores. The adoption of new distribution and transparency technologies can make it easier and more cost-effective for people to choose healthy and sustainable foods aligned with their health preferences. New distribution and shopper opportunities can be gained through retail solutions that serve food deserts in cities. Tracking technology (e.g., blockchain) can support more effective decision-making along the food supply chain on health and sustainability impacts and drive greater transparency for shoppers. Food and meal home deliveries can be tailored to provide healthier and more sustainable meals.

In parts of the world where food safety and food availability remain a challenge and people still lack access to clean water, milk, and vegetables, food manufacturers and retailers can partner to innovate and deliver affordable and accessible foods. The types of innovation areas are manifold- from improved packaging and conservation techniques to smart solutions to advance local production and enhanced transport. Food manufacturers can also partner with other service providers (public and private) to extend the market reach of existing players at a lower cost. It's a clear competitive advantage, unlocked by brand value.

The list above provides a sample of clear innovation opportunities but is not intended to be a comprehensive list of all the innovations the private industry can help drive forward to enable the transformation in the food systems.

B. Proactive self-regulation

Collaboration:
The private sector can work throughout the value chain to drive proactive industry-wide initiatives towards FReSH's shared goal of "healthy, enjoyable diets for all, produced responsibly within planetary boundaries by 2030."

Harmonization:
The private sector can help advance and accelerate legislation on a national and international level that supports a shift towards a healthier and more sustainable food system. For example, a higher level of label transparency with regard to health and sustainability of foods can make it easier for shoppers to choose foods that are better for them. Mobile applications and other technical solutions can inspire and enable shoppers to make better choices for themselves and the communities they source from.

C. Shaping demand by engaging with people in the right way

Create transparency to enable better consumer choices: Labeling can help consumers make better choices from a nutrition and sustainability point of view. The 2017 Consumer Goods Forum's call to action to more than 400 consumer goods companies shows how, together, companies can play to a single scalable change in food labeling that can significantly reduce edible food waste by simplifying food labels to "use by" and "best if used by." Technology can enable greater farm-to-fork transparency and nudge consumers to make better choices by providing helpful information that can positively influence their choices.

Reframing food value:
Educational initiatives are needed to reframe the value of healthy foods and emphasize the health, taste, and versatility benefits to create mass demand for healthy and sustainable foods. Beyond education, it also includes the opportunity to enroll key food influencers, including partnering with chefs to influence food culture. For example, FReSH could consider a coalition of aligned FReSH chefs to help deliver on the shared FReSH program ambition towards a healthy and sustainable food system under planetary boundaries. Chefs can help society overcome the often perceived trade-offs of healthy versus tasty, exemplified, for instance, by the Plant-Forward Global 50 curated by the EAT Foundation and the Culinary Institute of America. Leveraging the influence of social media as well as engaging in multi-stakeholder partnerships can furthermore help to make an impact.

Focus on children:
Educational initiatives and partnerships geared towards younger generations are needed to change the nutritional paradigms formed during early years of life. In many emerging markets, when parents move up to the middle class, they buy more packaged foods for their kids and see this as doing the right thing, as packaged foods are more convenient and safe to eat. The opportunity here is to ensure that parents don't have to compromise convenience for their children's health.

Make it easier to prevent food waste through education:
Reducing food waste is not as big a concern for people as other food behaviors are (e.g., food convenience). To provoke a transformational change in the way people think and act around food waste, companies can work together to use big data, technology, and packaging to help people better preserve the freshness of foods, facilitate portion control, and reduce food waste at home. Food producers and retailers can also do their part to reduce food waste and loss along the supply chain, considering how they purchase ingredients and packaging while exploring how reducing waste in the supply chain can be turned into consumer value.

We acknowledge that, over the past years, there have been many failures "educating" people towards healthy and sustainable eating. FReSH is collaborating with leading organizations in behavioral change to collect best practices and successful case studies to inform FReSH opportunities.

Basic good practices include the use of inspiring language and visuals that reframe the value and increase desire towards more sustainable and nutrient-dense diets, as well as choosing the right social media and cultural influencers who are trusted (e.g., chefs) and can inspire people to make better choices. These practices need to be a focus area for FReSH's market-based solutions.

Promising examples from selected companies towards the FReSH shared ambition

While it is still early days to say food companies are helping shift towards a healthier and more sustainable food system, it is worth covering some of the efforts companies are making to drive social and environmental impact through brand and supply chain innovations as well as educational initiatives.

The case studies in this report show some examples of how businesses are identifying solutions and interventions to help contribute to healthy and sustainable consumer choices. Each case study is mapped towards the opportunity areas of driving transformational change and the key trends it addresses. Furthermore, the key impact area is laid out and an indication is provided of the number of people impacted. Although the case studies below provide good examples of how companies can effect positive change, it's important to recognize that it's still early in the journey, with many opportunities still remaining for companies to take more proactive actions to help shift value chains and consumption towards a healthy and sustainable food system for people and the planet.

Figure 5: Case Study Overview

	Company / Contributor	Case study	Geographic influence	OPPORTUNITY AREA(S) TO DRIVE TRANSFORMATIONAL CHANGE: innovation	Self regulation	Shaping Demand Engaging	Key trends addressed	Key impact area	# of people impacted	Comment
Company Examples	Danone	Reduction of sugar content	World	✓	✓		Proactive health, Accessible nutrition	Health	> 1 M	> Progressive reduction of sugar
	Kellogg Company	MorningStar Farms Vegucation	America			✓	Food Adventure Shared with Technology, Proactive health, Plant Based Foods	Health	> 1 M	> Nature healthy intentions into delicious food
	Nestlé	Nestlé for Healthier Kids	World		✓	✓	Proactive health, Accessible nutrition	Health	> 1 M	> Inspire action and help 50 M children lead healthier lives
	Sigma Alimentos	Less Sodium and Fat in Packaged Meats	Europe/ Mexico	✓		✓	Proactive health	Health	> 1 M	> Increase awareness and provide healthy products
	Sonae	Transformar.te - transform yourself	Europe	✓		✓	Hyper-convenience, Food Waste elimination	Environment	1000 - 1 M	> Decrease food waste, reduce, reuse and recycle
	Stora Enso	Fresher Strawberries from fields to fork	Europe	✓		✓	Plant Based Foods, Food Waste elimination	Environment	1000 - 1 M	> Optimise packaging of strawberries
	Unilever	Follow in My Green Foodstep	Africa	✓		✓	Hyper-convenience, Proactive health, Accessible nutrition	Health	1000 - 1 M	> Encourage increased iron intake
Research & Advocacy	Smart Food	Diversifying Diets and Driving Commercialization of Traditional Grains	Africa			✓	Proactive health, Accessible nutrition	Health	1000 - 1 M	> Encourage diversifying diets and drive sales of traditional grains
	World Resources Institute	Don't put vegetables in the corner	World			✓	Plant Based Foods	Environment	< 1000	> Tested how plant-based sections on menus change ordering behaviour

Legend:

ATTRIBUTE	SCALE						
KEY TRENDS	Rooted in culture and tradition	Food Adventure Shared with Technology	Hyper-convenience	Proactive health	Plant Based Foods	Food Waste elimination	Accessible nutrition
KEY IMPACT AREA	Health	Environment	Social				
# OF PEOPLE IMPACTED	< 1000	1000 - 1 M	> 1 M				

Company examples

Case Study 1: DANONE

Progressive reduction of sugar content

When it comes to health, Danone strives to improve the nutritional quality of its products. To achieve this goal, Danone has deployed comprehensive internal nutritional targets since 2005. These targets have been applied in product renovation and innovation projects, in the frame of the "Nutrition Check" procedure embedded in the company's project management system. They are based on nutrition science, taking into account technical feasibility, and the consumer acceptance journey.

Regarding fresh dairy products, for instance Danone has progressively reduced sugar and fat content of brands in many countries. The margin of reduction was minimal for every year to ensure that consumers did not notice a significant change in taste but benefited from the continuously improved products. Even with these small changes in sugar and fat levels, Danone was able to achieve significant results over a long period of time. In Germany, the kids brand 'Fruchtzwerge' has reduced its sugar content by 25% since 1991. In Canada, added sugars in Danino drinks have been reduced by 18% since 2013.

Today, Danone has defined new targets with the objective to meet them by 2020 for all categories. They are based on official nutrient intake recommendations (WHO, EFSA, US Institute of Medicine, etc.), the latest scientific references on dietary practices as well as in-house targets developed from Danone's own research programs.

21% of the volumes sold in 2017 have had their nutritional value improved by reformulation in the three previous years. Thanks to these efforts, by the end of last year, 67% of Danone's whole portfolio was compliant with their ambition for 2020.

To set up a mission as ambitious as bringing health through food to as many as possible was a strategic decision Danone took two decades ago. Through a combination of divestment, investment and innovation, Danone has shifted the share of its portfolio that classifies as 'healthy categories[15] from 39% in 1996 to 88% in 2016. The rest of its portfolio is made up of healthier categories that allow customers to choose options that improve their diets, like low sugar beverages, occasional chilled products, and cooking aids. The recent acquisition of WhiteWave enabled Danone to add a wide variety of great-tasting, healthier food to the portfolio.

[15] Danone has an operational definition for "healthy categories" that regroups products for the general population that are intended and suitable for daily consumption in line with the food-based dietary guidelines (water, yogurts, milks and other daily dairy products, milks, and sugar-free beverages) - products for early life nutrition (children below 3 years) and advanced medical nutrition products ; these products have a nutritional composition that is tailored to the needs of their specific targets; and they comply to very demanding regulations

Case Study 2: KELLOGG COMPANY

MorningStar Farms® 'Vegucation' - "Just what the world ordered™"

Today, people in the United States consume on average 181 pounds of meat per person per year[16]. Raising animals for food consumes water, land and energy. For example, cattle, raised for beef and milk, represent about 9.4%[17] of total anthropogenic greenhouse gas emissions. In 2016, MorningStar Farms, a veggie line of foods within the Kellogg brand portfolio, designed a campaign to reinforce the people and planet benefits of eating vegetarian meals. To carry out the 'Just What the World Ordered' campaign, the brand developed three communication content pillars: (1) Veggie Cuisine – 'How veggie food fits my life', (2) Veg for All – 'Who eats veggie protein', and (3) Vegucation – 'Why eat veggie protein'.

The campaign featured materials including news articles, educational videos, a documentary and a Veg Effect CalculatorTM—a unique tool allowing users to calculate the environmental impact that swapping meat-containing meals for veggie meals has on water usage, land usage, and greenhouse gas emissions[18]. The objective of the calculator was to help US consumers understand the power that they had to make sustainable decisions and informed food choices – at literally every meal. The Veg Effect Calculator demonstrated the impact that swapping just one meal a week could have on the environment and showed users that one swap was equivalent to saving the water of 201 average showers and the greenhouse gas emissions equal to 6 times the average daily commute.

The campaign was successful. The Veg Effect Calculator has generated more than 64,000 unique views since its launch and more than 30 million people have watched the documentary. Sustainability was good for business too: the MorningStar Farms brand saw a 25% advertising lift for digital and print on its quest to educate more people on the impact of shifting to more veggie meals.

As the campaign initiator, MorningStar Farms formed a strong relationship with its consumers, who shared the positive benefits of swapping animal-based meals with MorningStar Farms and other plant-based foods.

While education on plant-based eating with initiatives such as Vegucation continue to be very important for MorningStar Farms, the brand also recognizes the critical role taste places in driving consumers' choice, which nudges a behavioral change towards more plant-based eating. Three quarters of the U.S. population is open to eating Veggie foods[19], but most consumers feel that a vegetarian diet is full of sacrifice. In 2017, MorningStar Farms launched "Grill it to Believe it!", a multi touchpoint commercial campaign with a focus on the taste experience of "America's Number 1 Veggie Burger" during the U.S. grilling season. With full commercial support in store alongside a robust sampling truck tour featuring celebrity chef Richard Blaise, MorningStar Farms saw explosive growth through the back half of 2017 and ended the year up +13% in Dollar Consumption vs 2016[20].

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[16] Economic Research Service from the United States Department of Agriculture https://www.ers.usda.gov/amber-waves/2017/ januaryfebruary/us-per-capita-availability-of-red-meat-poultry-and-fish-lowest-since-1983/
[17] http://www.fao.org/news/story/en/item/197623/icode/
[18] https://www.morningstarfarms.com/just_what_the_world_ordered/what-we-do.html#calculator
[19] Nielsen P52W Rolling 10/08/16; Veggie Demand Landscape
[20] Nielsen SCAN Data US xAOC Calendar Year 2017

Case Study 3: NESTLÉ

Nestlé
Good Food, Good Life

Nestlé for healthier kids - A global ambition to inspire action and help 50 million children lead healthier lives

Today, more than 2 billion people in the world are overweight or obese, and 800 million are malnourished. In 2018, Nestlé launched Nestlé for Healthier Kids, an initiative that accelerates efforts to support caregivers on their journey to raising healthier kids. Through the alignment of Nestle's portfolio with the nutritional needs of children and the adaptation of their communication and services delivered, the initiative is aimed at helping caregivers raise healthier kids while ensuring sustainable business growth.

Offering tastier and healthier choices:
Over the past years, more than 17,200 tons of salt and 8% of sugar have been removed from Nestlé's products. Furthermore, 1,041 new nutritious products where launched in 2017 that are targeted to address children's daily needs and gaps. Moving forward, Nestlé has set clear commitments to make their portfolio more nutritious, including a further reduction of salt, sugars, and saturated fats as well as the addition of important ingredients like fiber-rich grains, vegetables, or micronutrient in thousands of products across the world.

Inspiring people to lead healthier lives

- Through the various services provided by Nestlé for Healthier Kids, it is aimed to foster healthy behaviors from the start of life to adolescence. Two examples: A Nestlé program related to the first 1,000 days (Nestlé Start Healthy, Stay Healthy) translates the latest scientific findings into practical advice and helps parents understand what to feed, how to feed, and why the first 1,000 days are so crucial to their baby's future health. At the end of 2017, over 7 million parents had registered, and Nestlé's "It Takes All of Us" breastfeeding campaign reached 120 million parents, almost 95,000 healthcare professionals and 56,700 employees.
- Nestlé product brands also lead the children's health journey. MAGGI, the cooking brand of Nestlé, helps millions of families cook tasty and balanced meals. The brand is deploying an ambitious cooking education program for parents and kids, with recipes, simple cooking tips, and online courses. MAGGI is a Nestlé billionaire brand with sales increasing at a rate of more than 3 percent. Going forward, as the company continues to transform itself based on its purpose and shared value approach, it foresees growth of as much as 5 percent.

With the launch of the Nestlé for Healthier Kids initiative in 2018, Nestlé steps up actions for healthier kids, with the global ambition to help 50 million children lead healthier lives.

Case Study 4: SIGMA ALIMENTOS

Less sodium and fat in packaged meat

Sigma, a global food company dedicated to bringing local favorite foods to communities everywhere. Within 18 countries, Sigma offers quality branded foods at a range of price points and across diverse categories. Campofrío, Sigma's Spanish subsidiary introduced in 2013, as part of its health and wellness strategy, a variety of packaged meat products with low fat and low sodium content, under the new sub-brand Cuida-t +.
The mentioned brand portfolio was designed for consumers looking for healthier options, who at the same time enjoy the taste and physical characteristics of the products they are used to buy. While the fat reduction varies from one product category to another, the sodium reduction was around 25% in all of them.

In order to grow awareness on consumer minds of this new line, Campofrio launched a three phase campaign, which began with a strong media mix of TV, print, outdoor, and digital ads, aiming to inform consumers about the innovative product line availability in stores. Later on, the campaign focused on being part of important sports events such as cycling races, etc., through sponsorships, looking to address the target market. On the last phase, collaborations were made with different organizations whose work is to promote healthy lifestyles, associations such as the Spanish Heart Disease and the Spanish Foundation of Nutritionists.

The advertising campaign was measured and obtained a level of awareness of 50% among the Spanish population during its first three years since its launch; around 11% of households have bought at least one product from the Cuida-t+ at one point in time.

With the success of this product line in Spain, Cuida-t+ was eventually placed in other Sigma business units in Europe, such as NOBRE in Portugal and Fiorucci in Italy. Moreover, in 2017 Sigma Mexico adapted the concept and introduced Cuida-t+ under its flagship brand FUD.

Overall, today Cuida-t+line has been successfully launched in more than ten countries, and is one of the strong pillar product lines in Sigma's health and wellness innovation platform. This is only one example of how global companies can provide healthier and more sustainable solutions to the needs of their consumers.

Case Study 5: SONAE

Transformar.te - Transform Yourself

About one third of all food is wasted worldwide. To tackle food waste and to reduce, reuse, or recycle products without or with limited commercial value, Sonae MC, a Portuguese retail company, created the Transformar.te project, which translates into "transform yourself."

The project is based on four key pillars, namely:

Reduce:
Minimizing food loss and waste by repackaging bags of fruit when any unit is damaged, improving the depreciation process (pink labels), reviewing the rules of depreciation, improving the operational process (fully mobile), creating different labels for "best before" and "use by" and offering happy-hour discounts to speed up the sales of daily products at the end of the product's life (e.g., takeaway meals).

Reuse:
Assigning a different use to the products by donating products that no longer have any commercial value but are still fit for consumption to around 1,000 social institutions and make them available in social areas of the stores or warehouses, to be consumed by staff. Furthermore depreciated products are being used at internal or external caterings in order to improve awareness about food waste.

Recycle:
Transforming waste into new products to be sold at Sonae stores in a circular economy approach by creating new products from the otherwise wasted food and selling them. In order to be successful this requires telling the whole story and explaining why these kinds of products are good for the planet and for society (Sonae e.g. launched a range of jams and chutneys produced 100% from wastage of fruits and vegetables and is preparing a banana bread following the same principle).

Communicate:
Generate awareness for food waste by participating in TV shows, publishing reports and news articles, and distributing about half a million "good practices" guides at Continente stores.

The project reached around 20% of the Portuguese population and impacted more than 20,000 employees directly, giving them around €15–20 per month in products[21]. In two years, Sonae more than doubled its donations and decreased food waste by 10%. The yearly benefit of the project was €10M in social benefit and €3M in economic benefit. While Sonae didn't measure the environmental benefit, the brand goodwill, or the benefits across the entire value chain, it is believed to be very significant. Additionally, the project won the sustainability award at the "Food and Nutrition Awards" and has been chosen as finalist for the "Sustainable Initiative of the Year" at the World Retail Awards (the winner will be announced on 19 April 2018).

[21] Estimated average value of products at consumer prices that have been given to employees

Case Study 6: STORA ENSO

Fresher strawberries from field to fork

Strawberries are big business in Finland, but the harvest season is short and they are highly perishable. Therefore, Finland's largest strawberry farm Koivistoisen Mansikkapaikka approached Stora Enso to ask if the packaging process could be optimized so that fresher strawberries can be delivered to stores.

Stora Enso's DesignStudio cooperated with the customer in order to create a tailored packaging concept, which focused on three key topics – freshness, seasonality, and consumer experience – since these areas offered the most optimization potential.

The freshness of strawberries: Stora Enso found out that the plastic packaging used in the field slowed down the cooling process and caused extra work. To improve the process, strawberry pickers used a corrugated cardboard handle to fit the plastic boxes from there on.
In addition, the Stora Enso switched the boxes with larger shipping cartons, which save energy and provide fresher strawberries with a longer shelf life.

The seasonality: Consumers tend to buy only small volumes at the beginning of the season when prices are high and large amounts when prices start to drop. To address this bulk-buying consumer behavior, Stora Enso created a modular pack size system. Small, early-season boxes were combined with larger, bulk-sized boxes for late season.

The customer experience: Most strawberries are sold as commodities, with little attention paid to the potential of branded packaging design. To increase the consumer experience, Stora Enso decided to design the top-opening corrugated cardboard sleeve on the small boxes in a way that allows customers to turn it into a convenient handle. In addition, the new take-away boxes communicate the product's local origin, since consumers more and more tend to prefer ethical and sustainable product choices.

As a result of the tailored package concept, the farmer was able to reduce the labor costs while also enjoying a fast and simple packaging process. In addition, the time that strawberries need to travel from field to fork was reduced offering retailers a fresher product with an increased shelf life.

Case Study 7: UNILEVER

'Follow My Green Food Steps' - Increasing iron in everyday meals

'Follow My Green Food Steps' is a nutritious cooking behavior change program focused on increasing iron in commonly consumed meals. In 2015, Knorr launched iron-fortified bouillon cubes in Nigeria, where approximately 50% of women of reproductive age have anaemia and iron-rich foods are not often part of daily meals. By doing a deep-dive into current cooking behaviours, a program was developed to inspire cooks of today and tomorrow to add iron-rich ingredients, including iron fortified bouillon cubes, to their most loved dishes. Through the school and community-based programme, Knorr has reached over 220,000 mothers and daughters and has demonstrated that a well-designed programme that resonates with consumers via a catchy song and dance, radio drama, in-market reminders and exciting assets, can change behavior.

To measure the impact, a study was conducted in collaboration with Ibadan University using a control and experimental group both consisting of mothers and daughters. The study showed that the programme increased awareness of anaemia from 34 to 79% among mothers and 21 to 73% among daughters in the intervention group. Forty one percent of mothers in the intervention group started adding iron-rich leafy green vegetables to stews, which was the targeted behaviour change.

As well as supporting Knorr's ambition to improve iron intake and help decrease iron deficiency anaemia, the program helped deliver the brand's sustainable growth agenda as it created an uplift in brand equity measures. By raising awareness about iron deficiency, the programme also created demand for Knorr's new iron-fortified bouillon cubes.

The Follow My Green Food Steps program has since been adapted to increase reach through media channels and to be locally relevant. Unilever is working closely with existing and new partners to revise the program for roll-out in Africa and South-East Asia.

Research and advocacy

Case Study 8: SMART FOOD

Smart Food: Diversifying diets and driving commercialization of traditional grains

Food and nutrition insecurity continues to pose a serious challenge in many rural households in developing countries. In Kenya, nutrition insecurity is reflected in the increased prevalence of stunting (26%), wasting (4%), and underweight (11%) among children under five years of age[22] and in micronutrient deficiencies. Poor nutrition and a general lack of health consciousness are the main causes of these unhealthy outcomes.

In order to improve nutrition and health consciousness in Kenya, ICRISAT developed nutrition activities along three pathways: (1) production for own consumption, (2) agricultural income, and (3) women's empowerment.

The pathways include educating the local population on the importance of dietary diversity, encouraging them to reserve produce for their household consumption, using social marketing approaches to build markets for cereals and legumes, and working to support women with knowledge and skills on nutrition, energy-saving technologies/ innovations, and income-generating activities.

Under the Smart Food initiative, ICRISAT trained over 10,000 men and women through two-day workshops. Over 12,000 women farmers have been trained through participatory cooking classes where they were introduced to new recipes and energy-efficient innovations. Over 100,000 households have been reached with nutrition messages through a variety of behavior change communication activities.

Over 60,000 children below five years have been reached with nutrition messages through their parents, and around 800,000 Kenyans have been reached with messages to increase knowledge, change attitudes, and modify consumption behavior through the Smart Food TV show.

In only one year, women's and children's behavior changed significantly towards a more micronutrient-rich diet, indicated by a 20% increase in the dietary diversity score for women (WDDS) and an almost 100% increase in the children's dietary diversity score (CDDS). Similarly, consumers showed a considerable change in buying patterns since data showed an increase in sales of grain for all crops except the ones that are typically bought during droughts. Rich in iron and fiber, both cow pea and pearl millet sales at the farm level have more than doubled in the period of one year. There are plans to scale the Smart Food approach in other regions within and outside Kenya.

[22] KNBS and ICF Macro, 2015

Case Study 9: WORLD RESOURCES INSTITUTE

WORLD RESOURCES INSTITUTE

Don't put vegetables in the corner

Terms like "vegetarian," "vegan," or "healthy" rarely appeal to mainstream consumers—and they could be hamstringing the advancement of sustainable foods.

Take a first-of-its-kind experiment conducted by Linda Bacon, a graduate student in behavioral science and former global strategy director at Mars, Inc., with support from the World Resources Institute's Better Buying Lab. Her research tested whether placing plant-based dishes in a separate vegetarian section on restaurant menus influenced people's ordering.

Among 750 adults in the United Kingdom who usually eat meat or fish, 56% were less likely to order a dish labeled as vegetarian in a separate section. In fact, only 5.9% of those adults who received the online test menu with a designated vegetarian section chose a plant-based dish, compared to 13.4% of the adults who received an online menu with plant-based dishes listed among the meat and fish dishes.

Given just how many rea world menus currently put plant-based dishes in special vegetarian-only sections, there is a real opportunity to increase sales of these foods by changing people's ordering behavior through more effective language. Alternative language is emerging, but no one framing has become adopted across menus and advertising. The Better Buying Lab has also found that research about which terms appeal to consumers has also been inconsistent.

To remedy this and give the food industry an effective way of engaging diners who do not consider themselves vegan or vegetarian, the Better Buying Lab is testing a range of language around plant-based foods in order to ultimately create a lexicon to describe the category, its dishes and their benefits.

The potential for restaurants, food retailers, cafeterias, and others to boost their bottom line through plant-based foods while advancing their sustainability goals is there. But it will take the right language to seize it.

5. Conclusion and outlook

Conclusion

While understanding consumption behavior is a key prerequisite for unlocking new supply and demand solutions towards a transformational change of the food system, it is time for all food actors to come together and take action. This report aims to lay a foundation of consumption understanding from which to develop business solutions to drive change towards a healthier and more sustainable food system by 2030. It has identified key consumption behaviors, preferences, and barriers affecting people's food choices. Moreover, the report has examined food trends that will need to be accelerated or decelerated, respectively, to achieve the shared goal of FReSH's members.

In the overall discussion, it is important to not only consider health and nutrition but also environmental and socioeconomic factors. Social conditions of food production in particular are often neglected or considered a second priority behind environmental sustainability, while they should also be an integral part of the quest for sustainability. While the focus of this consumption report is on health and nutrition aspects, FReSH as a program considers all dimensions, which can be clearly seen in its shared ambition.

All member companies within FReSH acknowledge their responsibility and share the ambition to drive positive changes in the food systems towards more healthy and sustainable practices.

While clearly emphasizing that businesses have been part of the challenges to healthy and sustainable food systems in the past, FReSH member companies are clearly committed to being part of the solution—not only by accelerating the multi-trillion-dollar opportunity[22] but also by developing and driving sustainable business solutions. This can happen in at least three opportunity areas detailed in the report that businesses can act on, namely innovation, proactive self-regulation and shaping demand by engaging with people in the right way.

Outlook

Recognizing that we are only at the very beginning of the journey towards our 2030 vision, this report provides key insights on the 'fork' side of FReSH's fork-to-farm approach. As FReSH teams start working on market-based solutions to enable its transformational goals, this report provides critical understanding of what consumers want and why, so we can build a new healthy and sustainable food system that is relevant, meaningful, and desirable to consumers in all countries.

To translate the global and regional information and findings into transformative business solutions, FReSH has performed a gap analysis that compares current diets with dietary recommendations.

An important next phase of this work will be to build on the independently researched work on planetary boundaries by the EAT-Lancet commission, to be published later this year, which will be used which will be used to identify science-based targets for healthy and sustainable food systems.
The FReSH member companies will continue to towards 'develop' positive market-based solutions, to advocate more strongly for an abandonment of unhealthy food practices, and to provide scalable, implementable solutions—working from fork to farm, across the whole value chain.

In the next stage of FReSH's endeavor, members will focus on building the vision and success metrics, and on initiating market-based solutions that help advance FReSH's four transformational goals: (1) closing the dietary gaps, (2) assessing the true cost of food, (3) reducing food waste and loss, and (4) addressing hidden hunger in supply chains.

Working together with member companies and partners, FReSH will explore how behavior can be shifted to close the gaps and drive private-sector action on those four transformational goals to achieve "healthy, enjoyable diets for all, produced responsibly, within planetary boundaries by 2030."

[22] Business and Sustainable Development Commission, 2017. Better Business Better World. Available at: https://sustainabledevelopment.un.org/index.php?page=view&type=400&nr=2399&menu=1515

6. Acknowledgements

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About the World Business Council for Sustainable Development (WBCSD)

WBCSD is a global, CEO-led organization of over 200 leading businesses working together to accelerate the transition to a sustainable world. We help make our member companies more successful and sustainable by focusing on the maximum positive impact for shareholders, the environment and societies.

Our member companies come from all business sectors and all major economies, representing a combined revenue of more than $8.5 trillion and 19 million employees. Our Global Network of almost 70 national business councils gives our members unparalleled reach across the globe. WBCSD is uniquely positioned to work with member companies along and across value chains to deliver impactful business solutions to the most challenging sustainability issues.

Together, we are the leading voice of business for sustainability: united by our vision of a world where more than nine billion people are all living well and within the boundaries of our planet, by 2050.

www.wbcsd.org

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Credits

World Business Council for Sustainable Development

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